

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 June 2004 (24.06.2004)

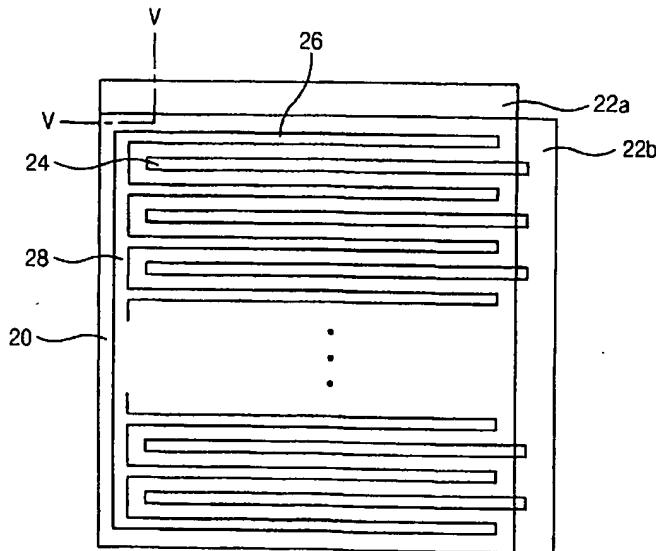
PCT

(10) International Publication Number  
**WO 2004/053917 A1**

- |  |                                  |   |
|--|----------------------------------|---|
| (51) International Patent Classification <sup>7</sup> :  | H01J 17/49                       | Gyoungsangbuk-do (KR). KIM, Min Soo [KR/KR]; #104-813 Donghwa Zootae, 593 Namyul-ri, Seok-jeok-myeon, Chilgok-gun, 718-831 Gyoungsangbuk-do (KR).   |
| (21) International Application Number:   | PCT/KR2003/002695                | (74) Agent: HWANG, Eui In; 10th Floor, Hankook Tire Bldg., 647-15 Yoksam-dong, Gangnam-gu, Seoul 135-723 (KR).  |
| (22) International Filing Date: 9 December 2003 (09.12.2003)   |                                  | (81) Designated States ( <i>national</i> ): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW. |
| (25) Filing Language:  | Korean                           | (84) Designated States ( <i>regional</i> ): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).  |
| (26) Publication Language:   | English                          |   |
| (30) Priority Data:  |                                  |   |
| 10-2002-0078268  | 10 December 2002 (10.12.2002) KR |   |
| 10-2002-0078713  | 11 December 2002 (11.12.2002) KR |   |
| (71) Applicant ( <i>for all designated States except US</i> ): ORION ELECTRIC CO., LTD. [KR/KR]; 257 Gongdan-dong, Gumi-si, 730-030 Gyoungsangbuk-do (KR). |                                  |   |
| (72) Inventors; and  |                                  |   |
| (75) Inventors/Applicants ( <i>for US only</i> ): MOON, Seok Joon [KR/KR]; 257 Gongdan-dong, Gumi-si, 730-904  |                                  |   |

*[Continued on next page]*

(54) Title: PLASMA DISPLAY PANEL FOR MULTI-SCREEN



WO 2004/053917 A1

(57) Abstract: The present invention relates to a multi-screen plasma display panel having improved structures of a sustain electrode and a scan electrode used in configuration of a multi-screen, thereby improving an operation characteristic and a brightness. In a unit plasma display panel, a front panel whereon a sustain electrode and a scan electrode are formed are sealed with a rear panel whereon an address electrode is formed. A multi-screen is formed by combining a plurality of the unit plasma display panels. End portions of the sustain electrodes to receive scan signals form a common electrode connected to the scan electrode, and the sustain electrode is configured to receive a sustain signal from the common electrode.



**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2003/002695

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 H01J 17/49**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 : H01J, G09G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00/70643 A2 (MARCOTTE, Robert, G) 23 NOVEMBER 2000 See claim 1	1
A	KR 00-44624 A (HUNDAY CORP) 15 JULY 2000 See the whole document	1
A	KR 98-75059 A (LG CORP) 05 NOVEMBER 1998 See claim 1,2 fige 5	1,4
T	JP 15-100213 A (DAINIPPON PRINTING COLTD) 04 APRIL 2003 See the whole document	1
A	KR 01-82878 A (SAMSUNG SDI CORP) 31 AUGUST 2001 See the whole document	1

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

24 FEBRUARY 2004 (24.02.2004)

Date of mailing of the international search report

25 FEBRUARY 2004 (25.02.2004)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KANG, Byung Sub

Telephone No. 82-42-481-5965



**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/KR2003/002695

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 00/70643 A2	23-11-00	JP 2003500796 T2 EP 1147539 A1 TW 460891 B CN 1304541 T US 6411035 BA	07-01-03 24-10-01 21-10-01 18-07-01 25-06-02
KR 00-44624 A	15-07-00	NONE	
KR 98-75059 A	01-11-98	NONE	
JP 15-100213 A	04-04-03	NONE	
KR 01-82878 A	31-08-01	NONE	